

# **Migratory Landbird Conservation on the Sequoia National Forest**

## ***Boulder Creek Fuels Restoration Project***

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Under the National Forest Management Act (NFMA), the Forest Service is directed to “provide for diversity of plant and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple-use objectives.” (P.L. 94-588, Sec 6 (g) (3) (B)). The January 2000 USDA Forest Service (FS) Landbird Conservation Strategic Plan, followed by Executive Order 13186 in 2001, in addition to the Partners in Flight (PIF) specific habitat Conservation Plans for birds and the January 2004 PIF North American Landbird Conservation Plan all reference goals and objectives for integrating bird conservation into forest management and planning.

In 2008, a *Memorandum of Understanding between the USDA Forest Service and the US Fish and Wildlife Service to Promote the Conservation of Migratory Birds* was signed. The intent of the MOU is to strengthen migratory bird conservation through enhanced collaboration and cooperation between the Forest Service and the Fish and Wildlife Service as well as other federal, state, tribal and local governments. Within the National Forests, conservation of migratory birds focuses on providing a diversity of habitat conditions at multiple spatial scales and ensuring that bird conservation is addressed when planning for land management activities.

The Draft Avian Conservation Plan for the Sierra Nevada Bioregion identified montane meadows, riparian habitat, late successional/old growth forest and oak woodlands as priority habitats for conservation (Siegel and DeSante 1999). Maintaining a diversity of habitats, including those identified as important for bird conservation is identified as a goal in the 2012 Giant Sequoia National Monument Management Plan.

The Sequoia National Forest is proposing to manage lands on the Hume Lake Ranger District in the Lower Boulder, Upper Boulder and Tenmile Creek watersheds. Proposed management is intended to implement direction contained within the 1988 Sequoia National Forest Land and Resource Management Plan (LRMP) (USDA 1988) as amended by the 2012 Giant Sequoia National Monument Management Plan (USDA 2012). Opportunities to promote conservation of migratory birds and their habitats in the project area were considered during development and design of the Boulder Creek Fuels Restoration Project (MOU Section C: item 1 and Section D: item 3).

### Project Specific Design Features:

Several project design features would be implemented to protect key bird habitat during project implementation in the action alternative:

- For any spring burning, active northern goshawk and spotted owl nest sites would be avoided. This would require surveys prior to burning and either putting in handline around the nest stand or modifying the boundary of the burn unit to exclude the area.

- “For prescribed fire treatments, use firing patterns, fire lines around snags and large logs, and other techniques to minimize effects on snags and large logs” (2012 Monument Plan, p. 91, S&G #48).

Likely impacts to habitats and select migratory bird populations resulting from the Boulder Creek Fuels Restoration Project have been assessed in detail within the project MIS report and impacts to select bird sensitive species and their habitats have been analyzed in the project Biological Evaluation. These impacts are summarized below:

### **Effect on Fox Sparrow Habitat from the Project Management Indicator Species Report (Cordes 2012a):**

#### **Cumulative Effects to Fox Sparrow Habitat (Shrubland) in the Analysis Area.**

The direct, indirect, and cumulative effects of the Boulder Project Alternative 2 will result in: (1) no change in acres of shrubland habitat, (2) a reduction in shrub ground cover classes on fewer than 1,878 acres following prescribed burning, and (3) a reduction in CWHR size classes of shrubs on some acres where older shrubs are killed by underburning.

#### **Relationship of Project-Level Habitat Impacts to Bioregional-Scale Fox Sparrow Trend.**

Since the Boulder Project will result in a reduction in shrub ground cover classes on less than 0.2% of existing shrubland habitat and a reduction in CWHR size classes of shrubs on only a small number of acres, this project will not alter the existing trend in the habitat, nor will it lead to a change in the distribution of fox sparrows across the Sierra Nevada bioregion.

### **Effect on Mountain Quail Habitat from the Project Management Indicator Species Report (Cordes 2012a):**

#### **Cumulative Effects to Mountain Quail Habitat (early seral and mid seral coniferous forest).**

The direct, indirect, and cumulative effects of the Boulder Project Alternative 2 will result in: (1) no change in acres of early and mid seral coniferous forest habitat, (2) a possible reduction of CWHR size class on some acres, depending on mortality patterns, (3) a reduction in tree canopy closure on fewer than 4,463 acres, and (4) a decrease in understory shrub canopy closure on fewer than 4,463 acres.

#### **Relationship of Project-Level Habitat Impacts to Bioregional-Scale Mountain Quail Trend.**

Since the direct, indirect, and cumulative effects of Alternative 2 of the Boulder Project would result in no change in early and mid seral coniferous forest habitat acres, a possible reduction of CWHR size class, and a reduction in tree canopy closure and shrub understory on a maximum of 4,463 acres (less than 0.2% of the early and mid seral coniferous forest habitat in the bioregion), this project will not alter the existing trend in the habitat, nor will it lead to a change in the distribution of mountain quail across the Sierra Nevada bioregion.

### **Effect on Sooty Grouse Habitat from the Project Management Indicator Species Report (Cordes 2012a):**

#### **Cumulative Effects to Sooty Grouse Habitat (late seral open canopy coniferous forest):**

The direct, indirect, and cumulative effects of the Boulder Project Alternative 2 will result in: (1) no change in acres of late seral open canopy coniferous forest habitat, (2) no change in CWHR tree size

class on any acres, (3) no change in tree canopy closure, and (4) a decrease in understory shrub canopy cover on a maximum of 14 acres.

#### **Relationship of Project-Level Habitat Impacts to Bioregional-Scale Trends.**

Since the direct, indirect, and cumulative effects of Alternative 2 of the Boulder Project will result in no change in the number of acres of late seral open canopy coniferous forest habitat, size classes or tree canopy closure and a reduction in shrub understory on a maximum of 14 acres, this project will not alter the existing trend in the habitat, nor will it lead to a change in the distribution of sooty grouse across the Sierra Nevada bioregion.

#### **Effect on California Spotted Owl Habitat from the Project Management Indicator Species Report (Cordes 2012a):**

##### **Cumulative Effects to California Spotted Owl Habitat (late seral closed canopy coniferous forest):**

The direct, indirect, and cumulative effects of the Boulder Project Alternative 2 will result in: (1) no change in acres of late seral closed canopy coniferous forest; (2) the possibility of a slight reduction in canopy closure on some acres (estimated to be less than 1% using the FOFEM5 model); and (3) little change in the number of average large snags per acre, depending on fire behavior (underburning is likely to both create and remove snags).

#### **Relationship of Project-Level Habitat Impacts to Bioregional-Scale Trends.**

Since the direct, indirect, and cumulative effects of the Boulder Project Alternative 2 will result in no change in acres of late seral closed canopy coniferous forest habitat, a slight reduction in canopy closure (estimated to be less than one percent), and little change in the average large snags per acre, this project will not alter the existing trend in the habitat, nor will it lead to a change in the distribution of California spotted owls across the Sierra Nevada bioregion.

#### **Determination of effects on Northern Goshawks and California Spotted Owls from the Wildlife Biological Evaluation (Cordes 2012b):**

It is my determination that Alternative B of the Boulder Creek Fuels Restoration Project **may affect individuals**, but is not likely to result in a trend toward Federal listing or loss of viability of northern goshawks or California spotted owls. The cumulative effects of this alternative would lead to a short term reduction of canopy cover and down woody debris on less than 14% of the existing habitat in the analysis area. While prescribed fire could cause some short-term disruption of these species use of the project area, most of the treatments would occur outside the nesting season. Effects from any spring burning would be mitigated with the use of buffers if necessary.

The return of fire to this area would provide for long-term maintenance of the habitat. As with other native species, it is assumed that the restoration of a natural fire regime and the maintenance of a mosaic of old growth forest conditions throughout the project area would benefit northern goshawks and spotted owls.

#### **Effect on Hairy Woodpecker Habitat from the Project Management Indicator Species Report (Cordes 2012a):**

**Cumulative Effects to Hairy Woodpecker Habitat (snags in green forest):**

The direct, indirect, and cumulative effects of the Boulder Project Alternative 2 will result in: (1) little change in the number of medium and large snags (>15" dbh, but <30" dbh) per acre (depending on fire behavior and safety requirements); (2) little change in large snags (>30" dbh) per acre (safety hazards may be removed and prescribed fire would have little impact).

**Relationship of Habitat Impacts to Bioregional-Scale Hairy Woodpecker Trend.**

Since the direct, indirect, and cumulative effects of the Boulder Project Alternative 2 will result in little change in the number of snags >15" dbh per acre and little change in large snags (>30" dbh) per acre (snags could be lost and created by prescribed fire; safety hazards would be removed if necessary), this project will not alter the existing trend in snags, nor will it lead to a change in the distribution of hairy woodpeckers across the Sierra Nevada bioregion.

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